# STIC Biotechnology Systems Branch

# RAW SEQUENCE LISTING ERROR REPORT

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Application Serial Number:	10/534.099
Source:	P47/10
Date Processed by STIC:	5//6/05

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FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

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http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<<u>http://www.uspto.gov/ebc/efs/downloads/documents.htm></u>, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- 3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/24/05



PCT

RAW SEQUENCE LISTING DATE: 05/16/2005
PATENT APPLICATION: US/10/534,099 TIME: 12:07:15

Input Set : E:\UTSC772US.APP.txt

Output Set: N:\CRF4\05162005\J534099.raw

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             AKIYAMA, HARUHIKO
      6 <120> TITLE OF INVENTION: HA4, A NEW OSTEOBLAST- AND CHONDROCYTE-SPECIFIC SMALL
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      9 <130> FILE REFERENCE: UTSC:772US
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/534,099
     12 <141> CURRENT FILING DATE: 2005-05-06
                                                               pp 3,6
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     15 <151> PRIOR FILING DATE: 2003-11-04
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     47 gag aac ccc aag gtg aag caa aaa gcg ctg atc cgg cag agg gag gtg
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     51 gta gac ctg tat aat gga atg tgt cta caa gga cca gca gga gtt ccc
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     57 65
                                                                          288
     59 atc cca ggt cgg gat gga ttc aaa ggg gaa aag gga gaa tgc tta agg
     60 Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys Leu Arg
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63 gaa agc ttt gag gag tcc tgg acc cca aac tat aag cag tgt tcg tgg





## RAW SEQUENCE LISTING

DATE: 05/16/2005 PATENT APPLICATION: US/10/534,099 TIME: 12:07:15

Input Set : E:\UTSC772US.APP.txt

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99	67 ag	gt tcg	ctg	aac	tat	ggc	ata	gat	ctt	ggg	aaa	att	gcg	gag	tgt	aca	384
71 ttc acg aag atg cgc tcc aac agt gct ctg cga gtt ctg tca gtg gcc 72 Phe Thr Lys Met Arg Ser Asn Ser Ala Leu Arg Val Leu Phe Ser Gly 73 130 140 155 140 140 155 160 155 160 155 160 155 160 155 160 155 160 155 160 155 160 155 160 155 160 155 160 155 160 155 160 155 160 155 160 150 155 160 155 160 150 155 160 150 155 160 155 160 150 155 160 150 155 160 150 155 160 150 155 160 150 155 160 150 155 160 150 155 160 150 155 160 150 155 160 150 155 160 150 155 160 150 155 160 150 155 160 150 155 160 150 155 160 150 155 160 150 155 160 150 155 160 150 150 150 150 150 150 150 150 150 15		er Ser		Asn	Tyr	Gly	Ile	_	Leu	Gly	Lys	Ile	Ala	Glu	Cys	Thr	
72 Phe Thr Lys Met Arg Ser Asn Ser Ala Leu Arg Val Leu Phe Ser Cly 73 130 135 140 75 toa ctt cgg ctc aaa tgc agg aat gca tgc tgt cag cgc tgg tat ttt 480 76 Ser Leu Arg Leu Lys Cys Arg Asn Ala Cys Cys Gln Arg Trp Tyr Phe 77 145 150 160 79 aca ttt aat gga gct gaa tgt tca gga cct ctt ccc atc gaa ggc atc 528 80 Thr Phe Asn Gly Ala Glu Cys Ser Gly Pro Leu Pro Ile Glu Ala Ile 81 165 170 175 83 atc tat ctg gac caa gga agc cct gag tta aat tca act att aat att 576 84 Ile Tyr Leu Asp Gln Gly Ser Pro Glu Leu Asn Ser Thr Ile Asn Ile 85 180 180 185 190 87 cat cgt act tcc tct gtg gaa gga ctc tgt gaa ggg att ggt gct gga 624 88 His Arg Thr Ser Ser Val Glu Gly Leu Cys Glu Gly Ile Gly Ala Gly 89 195 200 205 91 ttg gta gat gtg gcc atc tgg gtt ggc acc tgt tca gat tac ccc aaa 672 92 Leu Val Asp Val Ala Ile Trp Val Gly Thr Cys Ser Asp Tyr Pro Lys 93 210 215 220 95 gga gac gct tct act gga tgg att cc gtg tct cgc atc att tga 720 96 Gly Asp Ala Ser Thr Gly Trp Asn Ser Val Ser Arg Ile Ile Ile Glu 97 225 230 235 240 99 gaa cta ccg aaa taa 100 Glu Leu Pro Lys 104 <210> SEQ ID NO: 2 105 <211> LENGTH: 244 106 <212> TYPE: PRT 107 <213> ORGANISM: Artificial Sequence 109 <220> FEATURE: 110 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 111 Peptide 113 <400> SEQUENCE: 2 114 Met His Pro Gln Gly Arg Ala Ala Pro Pro Gln Leu Leu Gly Leu 115 1 5 1 15 16 Phe Leu Val Leu Leu Leu Gln Leu Ser Ala Pro Ser Ser Ala Ser 117 20 40 118 Glu Asn Pro Lys Val Lys Gln Lys Ala Leu Ile Arg Gln Arg Glu Val 119 35 40 40 45 120 Val Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala Gly Val Pro 121 50 5 60 122 Gly Arg Asp Gly Ser Pro Gly Ala Asn Gly Ile Pro Gly Thr Pro Gly 123 65 70 75 80 124 Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys Leu Ang 125 90																	400
130		_	_	_	_			_	-	_	-	-	_		_		432
75 tca ctt cgg ctc aaa tgc agg aat gca tgc tgt cag cgc tgg tat ttt 76 Ser Leu Arg Leu Lys Cys Arg Asn Ala Cys Cys Gln Arg Trp Tyr Phe 77 145 150 150 155 160 160 79 aca ttt aat ggg gct gaa tgt tca gga cct ctt ccc atc gaa gcc atc 528 80 Thr Phe Asn Gly Ala Glu Cys Ser Gly Pro Leu Pro Ile Glu Ala Ile 165 170 175 175 183 atc tat ctg gac caa gga agc ct gag tta aat tca act att aat att 576 84 Ile Tyr Leu Asp Gln Gly Ser Pro Glu Leu Asn Ser Thr Ile Asn Ile 185 180 190 185 190 186 187 180 190 187 180 190 187 180 190 187 180 190 187 180 190 187 180 190 187 180 190 180 190 180 190 180 190 180 190 195 190 180 190 195 1			_	Met	Arg	ser		ser	АІА	ьеи	Arg		ьeu	rne	Ser	GTÀ	
76 Ser Leu Arg Leu Lys Cys Arg Asn Ala Cys Cys Gln Arg Trp Tyr Phe 77 145				ctc	aaa	tac		aat	qca	tac	tat		cac	taa	tat	ttt	480
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80 Thr Phe Asn Gly Ala Glu Cys Ser Gly Pro Leu Pro Ile Glu Ala Ile 81	77 14	15				150					155		-	-	_	160	•
81																	528
83 atc tat ctg gac caa gga agc cct gag tta aat tca act att aat att 576 84 Ile Tyr Leu Asp Gln Gly Ser Pro Glu Leu Asn Ser Thr Ile Asn Ile 180 185 180 185 190 87 cat cgt act tcc tct gtg gaa gga ctc tgt gaa ggg att ggt gct gga 624 88 His Arg Thr Ser Ser Val Glu Gly Leu Cys Glu Gly Ile Gly Ala Gly 205 91 ttg gta gat gtg gcc atc tgt gaa ggg att ac ccc aaa 672 92 Leu Val Asp Val Ala Ile Trp Val Gly Thr Cys Ser Asp Tyr Pro Lys 210 220 205 93 210 215 220 205 93 210 215 220 205 93 210 215 220 206 66 Gly Asp Ala Ser Thr Gly Trp Asn Ser Val Ser Arg Ile Ile Ile Glu 27 225 230 235 240 735 220 235 240 240 25 EQ Ileu Val Asp Val Ala Ile Trp Val Gly Thr Cys Ser Asp Tyr Pro Lys 220 96 Gly Asp Ala Ser Thr Gly Trp Asn Ser Val Ser Arg Ile Ile Ile Glu 27 225 230 235 240 735 240 735 220 230 235 240 735 240 25 25 230 240 735 25 240 735 26 210 NO: 2 230 235 240 735 240 240 25 SEQ ID NO: 2 200 SEQ ID NO: 2 200 SEQ ID NO: 2 200 FEATURE: 110 <223 OTHER INFORMATION: Description of Artificial Sequence: Synthetic 111 Peptide 113 <400 SEQUENCE: 2 114 Met His Pro Gln Gly Arg Ala Ala Pro Pro Gln Leu Leu Leu Gly Leu 115 1 5 10 15 15 16 Phe Leu Val Leu Leu Leu Gln Leu Ser Ala Pro Ser Ser Ala Ser 117 20 25 30 186 Glu Asn Pro Lys Val Lys Gln Lys Ala Leu Ile Arg Gln Arg Glu Val 119 35 40 45 120 Val Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala Gly Val Pro Gl2 Gly Arg Asp Gly Ser Pro Gly Ala Asn Gly Ile Pro Gly Thr Pro Gly 22 Gly Arg Asp Gly Ser Pro Gly Ala Asn Gly Ile Pro Gly Thr Pro Gly 22 Gly Arg Asp Gly Ser Pro Gly Ala Asn Gly Ile Pro Gly Thr Pro Gly 23 65 70 75 80 124 Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys Leu Arg 125 80 85 90 95 95		nr Phe	Asn	Gly		Glu	Cys	Ser	Gly		Leu	Pro	Ile	Glu		Ile	
84 Ile Tyr Leu Asp Gln Gly Ser Pro Glu Leu Asn Ser Thr Ile Asn Ile 85 180 180 185 190 87 cat cgt act tcc tct gtg gaa gga ctc tgt gaa ggg att ggt gct gga 624 88 His Arg Thr Ser Ser Val Glu Gly Leu Cys Glu Gly Ile Gly Ala Gly 89 195 200 205 91 ttg gta gat gtg gcc atc tgg gtt ggc acc tgt tca gat tac ccc aaa 672 92 Leu Val Asp Val Ala Ile Trp Val Gly Thr Cys Ser Asp Tyr Pro Lys 93 210 215 220 95 gga gac gct tct act gga tgg aat tcc gtg tct cgc atc atc att gaa 720 96 Gly Asp Ala Ser Thr Gly Trp Asn Ser Val Ser Arg Ile Ile Ile Glu 97 225 230 235 240 99 gaa cta ccg aaa taa 720 99 gaa cta ccg aaa taa 735 100 Glu Leu Pro Lys 104 <210> SEQ ID NO: 2 105 <211> LENGTH: 244 106 <212> TYPE: PRT 107 <213> ORGANISM: Artificial Sequence 109 <220> FEATURE: 110 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 111		-a + - +	a+ a	<b>a</b> 20		~~~	200	aat	~~~		<del>+</del>	+	t	~++			E76
85																	576
87 cat cgt act tcc tct gtg gaa gga ctc tgt gaa ggg att ggt gct gga 88 His Arg Thr Ser Ser Val Glu Gly Leu Cys Glu Gly Ile Gly Ala Gly 195		ic lyi	ncu.		0111	CLY	DCI	110		ьси	71311	DCI	1111		ASII	116	
88 His Arg Thr Ser Ser Val Glu Gly Leu Cys Glu Gly Ile Gly Ala Gly 89	87 ca	at cgt	act	tcc	tct	gtg	gaa	gga		tgt	gaa	ggg	att		gct	gga	624
91 ttg gta gat gtg gcc atc tgg gtt ggc acc tgt tca gat tac ccc aaa 672 92 Leu Val Asp Val Ala Ile Trp Val Gly Thr Cys Ser Asp Tyr Pro Lys 93 210 215 220 95 gga gac gct tct act gga tgg aat tcc gtg tct cgc atc atc att gaa 720 96 Gly Asp Ala Ser Thr Gly Trp Asn Ser Val Ser Arg Ile Ile Ile Glu 97 225 230 735 100 Glu Leu Pro Lys 104 <210> SEQ ID NO: 2 105 <211> LENGTH: 244 106 <212> TYPE: PRT 107 <213> ORGANISM: Artificial Sequence 109 <220> FEATURE: 110 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 111 Peptide 113 <400> SEQUENCE: 2 114 Met His Pro Gln Gly Arg Ala Ala Pro Pro Gln Leu Leu Gly Leu 115 1 5 10 15 116 Phe Leu Val Leu Leu Leu Leu Gln Leu Ser Ala Pro Ser Ser Ala Ser 117 20 25 30 118 Glu Asn Pro Lys Val Lys Gln Lys Ala Leu Ile Arg Gln Arg Glu Val 119 35 40 45 120 Val Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala Gly Val Pro 121 50 5 60 122 Gly Arg Asp Gly Ser Pro Gly Ala Asn Gly Ile Pro Gly Thr Pro Gly 123 65 70 75 80 124 Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys Leu Arg 125 90 95																	
92 Leu Val Asp Val Ala Ile Trp Val Gly Thr Cys Ser Asp Tyr Pro Lys 93											•						
93																	672
95 gga gac gct tct act gga tgg aat tcc gtg tct cgc atc atc att gaa 720 96 Gly Asp Ala Ser Thr Gly Trp Asn Ser Val Ser Arg Ile Ile Ile Glu 240 99 gaa cta ccg aaa taa 735 100 Glu Leu Pro Lys 104 <210> SEQ ID NO: 2 105 <211> LENGTH: 244 106 <212> TYPE: PRT 107 <213> ORGANISM: Artificial Sequence 109 <220> FEATURE: 110 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic Peptide 113 <400> SEQUENCE: 2 114 Met His Pro Gln Gly Arg Ala Ala Pro Pro Gln Leu Leu Gly Leu 15 1 5 10 5 30 116 Phe Leu Val Leu Leu Leu Gln Leu Ser Ala Pro Ser Ser Ala Ser 117 20 25 30 118 Glu Asn Pro Lys Val Lys Gln Lys Ala Leu Ile Arg Gln Arg Glu Val 119 35 40 45 120 Val Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala Gly Val Pro 121 50 5 60 122 Gly Arg Asp Gly Ser Pro Gly Ala Asn Gly Ile Pro Gly Thr Pro Gly 123 65 70 70 75 80 124 Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys Leu Arg 125 85 90 95			_	Val	Ата	TTE	_	Val	GLY	Thr	Cys		Asp	Tyr	Pro	Lys	
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114 Met His Pro Gln Gly Arg Ala Ala Pro Pro Gln Leu Leu Leu Gly Leu 115 1 5 5 10 10 15 116 Phe Leu Val Leu Leu Leu Leu Gln Leu Ser Ala Pro Ser Ser Ala Ser 117 20 20 25 30 118 Glu Asn Pro Lys Val Lys Gln Lys Ala Leu Ile Arg Gln Arg Glu Val 119 35 40 45 120 Val Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala Gly Val Pro 121 50 55 60 122 Gly Arg Asp Gly Ser Pro Gly Ala Asn Gly Ile Pro Gly Thr Pro Gly 123 65 70 75 80 124 Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys Leu Arg 125 85 90 95	111		Pept:	ide													
115			-										_	_			
116 Phe Leu Val Leu Leu Leu Gln Leu Ser Ala Pro Ser Ser Ala Ser 117 20 25 30  118 Glu Asn Pro Lys Val Lys Gln Lys Ala Leu Ile Arg Gln Arg Glu Val 119 35 40 45  120 Val Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala Gly Val Pro 121 50 55 60  122 Gly Arg Asp Gly Ser Pro Gly Ala Asn Gly Ile Pro Gly Thr Pro Gly 123 65 70 75 80  124 Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys Leu Arg 125 85 90 95			s Pro	o Glr	ı Gl	Arc	y Ala	a Ala	a Pro			n Lei	ו Leı	ı Leı			
117			11 Va	Lou	. To:	) 1 TO1	. To.		. T.O.			n Pro	. 501	- Sa			
118 Glu Asn Pro Lys Val Lys Gln Lys Ala Leu Ile Arg Gln Arg Glu Val 119																a per	
119														_	-	ı Val	
121 50 55 60  122 Gly Arg Asp Gly Ser Pro Gly Ala Asn Gly Ile Pro Gly Thr Pro Gly 123 65 70 75 80  124 Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys Leu Arg 125 85 90 95						_								-			
122 Gly Arg Asp Gly Ser Pro Gly Ala Asn Gly Ile Pro Gly Thr Pro Gly 123 65 70 75 80 124 Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys Leu Arg 125 85 90 95		/al As	p Lei	ı Tyr	Asr	ı Gly	/ Met	Cys	s Lei	ı Glr	ı Gly	y Pro	o Ala	a Gly	y Val	l Pro	
123 65 70 75 80  124 Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys Leu Arg 125 85 90 95																	
124 Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys Leu Arg 125 85 90 95			g Asp	o Gly	/ Ser			/ Ala	a Asr	ı Gly			o Gly	/ Thi	r Pro		
125 85 90 95			^ Cl-	, 7\~~	, 7\a-			` T•••	٠, ١٠	, (1.		-	, (1)		- Ta		
		rTe LT	O GI	, TAT C	_	_	, 1116	- nys	י פד)		_	2 GT	y GIL	и су:		_	
		Slu Se	r Phe	e Glu			Tr	Thi	r Pro		-	r Lys	s Glr	ı Cys			





DATE: 05/16/2005

TIME: 12:07:15

### RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/534,099

Input Set : E:\UTSC772US.APP.txt

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     132 Ser Leu Arg Leu Lys Cys Arg Asn Ala Cys Cys Gln Arg Trp Tyr Phe
     133 145
                             150
                                                  155
     134 Thr Phe Asn Gly Ala Glu Cys Ser Gly Pro Leu Pro Ile Glu Ala Ile
                         165
                                              170
     136 Ile Tyr Leu Asp Gln Gly Ser Pro Glu Leu Asn Ser Thr Ile Asn Ile
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                                         185
     138 His Arg Thr Ser Ser Val Glu Gly Leu Cys Glu Gly Ile Gly Ala Gly
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                                     200
     140 Leu Val Asp Val Ala Ile Trp Val Gly Thr Cys Ser Asp Tyr Pro Lys
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    181 tcatgtaaca aaggcagtga ctaattgcac tttcaattgt ttttcttaag gagcagttgt 1140
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DATE: 05/16/2005

TIME: 12:07:15

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/534,099

Input Set : E:\UTSC772US.APP.txt

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	_	tctatcttat				-	
		taagatgtcc					
		gacagcattt		-	_		
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	_	_					
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		aatccacctg					
199	cacgcccggc	tattagtcag	gtttttaaga	cacaattttt	ttttaaaaaa	aaaatacacg	2220
200	aatatacatt	acaattcttt	attagtacca	cagtggttcc	aataggatgc	tgaaactgta	2280
201	ttttgaggtg	aaaaccacct	caatcttggc	tgcctgccct	cggccttcct	ctcaggcana	2340
202	agaggctgaa	ggcancccaa	tctgttgtag	accanaaaac	ccntgccgag	tcttagtggg	2400
203	aaaaatatgg	aggctcatgg	ggcaaaggtg	aacgcngccc	tctcctgagt	tcgctgtaaa	2460
		ccttggcggc					
		cacagcagcc	_	_			
		aaatgacttt					
		taattaccat					
		cttctgtagt					
		gagagcaagg		_	_		
		cttaggaaac					
		tgataaaaat					
		cagtngttnc					
		gaaaaagaaa					
		taatgccttg					
	-	attaaaacaa				-	
		ggtttgcaag		-			
		tcttgccatg		-	-	-	
		aagtaaaact					
		atacattgcg					
		tttaaggcta					
		agctgattgt					
		agaccaatca					
		tttgccaaat			_		
224	atttatcagc	ttttttaccc	caaaaccaag	aggctgcaga	ctctctttt	tcctataaag	3720
225	aacagtttct	ccagcagggg	ccctcctgcg	gtgtgctggt	ttcctggtta	aagcatgtgg	3780
226	ccactcttgg	ctttgatgaa	ccaccagata	aagttttta	gccatcttta	ttatccaaca	3840
		aacattcatt					
		tgcacccaaa					
		caaagcagcg					
		cagtttctaa					
	- 5 9	J	J J J J 0			· · · · · · ·	





DATE: 05/16/2005

TIME: 12:07:15

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/534,099

Input Set : E:\UTSC772US.APP.txt

				aaaaaagca				
				agtgaattta				
				tacgaatttt				
				caaatgtcct				
				gcggcccaca				
2	36	gaatctggaa	gagaagaggg	aactaggcgg	ctcgagagag	aatggaacga	taatggaacc	4440
2	37	aagacatcag	tctgatcaag	gttcaatttt	actatttgga	gacactgggt	tatgaagtag	4500
2	38	agggagggc	ccattcctgc	caaatcatcc	ttggagtcca	gtttcaggtg	accacgtgtt	4560
				gcaggtagca				
2	40	gctctnttag	ccctaacagt	caaacctgat	cagccagatt	tcaggctggg	ggggaggtta	4680
				ttcatgcagc				
2	42	attgagacag	gaatttgctg	tgtagccttt	attgtcttgg	aatttgctct	gtaaactagg	4800
2	43	ctgtccatga	actcacagag	atctacctgc	ctttgcctcc	ctagtgctgg	ggttaaaggt	4860
2	44	gttcaccacc	accacctage	ccataatctc	atattctatc	aagggattta	ggttccataa	4920
2	45	atgcacttat	cataagaggt	tccaacagat	ggaacacaac	tacacagtat	aaggtggact	4980
2	46	aatacatgtg	tgtccttggt	gaagaatccc	ttatcttatg	tcctttcatg	tgcttgcttt	5040
2	47	atcaaaacat	cctttcacct	gtgtctgctt	taggataaca	ctccttcaca	tgtttgccac	5100
2	48	agcaaagcac	catcagacac	gactgacttt	ccaaagaacc	cttaagtttc	cacttcagat	5160
2	49	aggcatcttc	ttctttaggt	taagaaaatt	tttttcctgt	cactctgtgg	aaaatatttt	5220
2	50	ctgtgcattt	gacctgtgtt	tcttctcctt	ccttaattct	tattttagat	ttggtcactt	5280
2	251	cacagtgtcc	cagatttcct	ggatgttttg	aaccaggagt	tatttttaga	ttgaacattt	5340
2	52	tctttgacct	atgtattcat	ttcttctacc	atgtcttcag	tgtctgagat	tctcttttt	5400
2	53	aattcttgaa	ttctgttggt	gaagcttgcc	tctgtggttg	ctgttcaaat	tcctatattt	5460
2	54	tcatttccat	atttccctca	gtttggggtc	tctttattaa	ttctgttgga	ggaagggggt	5520
2	55	ccaggagtca	cctcacaaat	cacatattcc	caggattgat	tgatcaggac	caccggccag	5580
2	256	actcaggagc	tgaactgtga	tgtagagtca	agatcctaca	gggcttttaa	agcctgagag	5640
2	57	ctataataac	catctctgct	aagttactcc	accaatcata	acttagggat	agggctttct	5700
2	258	gtaggagcat	gtctttgttg	tgtacttatt	ttgctcctat	tggttagggt	attcaactat	5760
2	59	ggcagaggac	ttgcctcatc	ttatattcat	gtcttagctt	gccaaccagg	atatcagttt	5820
2	60	tccacataca	tgtctctttc	tgtcaagtag	gatatcaagt	tcccagggag	gtcttggaaa	5880
2	61	cctaaacttt	attctgcccc	tactcaaaat	ggaagtctta	ttctaaatag	gtacaggtgt	5940
2	62	ctctcttatg	ttgggatcca	tcccaagggc	agcttaaaag	gcaaatacta	taaaggctga	6000
2	63	tacacaggtg	cagaaagtgt	tggtttctga	gaacatccta	gtaacagaag	taacagcata	6060
2	64	tgagaaagtt	tccttgtgat	attaggaaca	gcacaaactg	gtaggttaga	cgggtaacag	6120
2	65	ttaccaagac	cttaacaatc	ccagttcctc	tttcaggtct	tgagtggctg	tattcctttc	6180
2	66	cttccattgt	ttgtgctttc	atagacttct	ttaagggatt	taatgttttc	tttttaagga	6240
2	67	cctctagcat	acacatatag	gctgtgttaa	ggtctttatg	tgtgcttcca	gggtgtaata	6300
2	68	ctcagggcct	gctgtgatag	ggttggtggg	ttctagtgga	gacctatcgt	cctggctgta	6360
2	69	attggttgtg	caggggtagc	ctgtaggttc	ccaatgagtg	tgtgcctgag	ctggatgctt	6420
2	70	gggaaaaaca	ttgagtgacg	ggaggaaagt	ggggggccag	ggatctgtat	gcttcactga	6480
2	71	agatgggtgc	agaagcagcc	tagggctgag	actgaggggt	tccactctga	gaagcagagg	6540
2	72	gagaggtgaa	gatctgcagt	tagcccacct	gcgtccctgc	ccagtgtggc	ctgtgggttc	6600
2	73	ccagggagtg	ccggctggag	ttgggggtgg	agggtaggac	agggcaatga	gtggggaag	6660
2	74	ggaatttagg	aggggaagat	ctgtgggatc	caccagcgat	gaggtggctg	tggtggaagc	6720
2	75	cgctgcagga	gttagcgcag	agctcaggat	gaaactaggg	attgggcgtg	gaggaatgga	6780
				tccctctccc				
				ttggaggctg				
				tgaaataagc				
				cagttcacct				
							•	

10/534,099

last "n" in Sequerce 3



RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/10/534,099

DATE: 05/16/2005 TIME: 12:07:16

Input Set : E:\UTSC772US.APP.txt

Output Set: N:\CRF4\05162005\J534099.raw

#### Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 265,1987,2010,2018,2032,2339,2355,2375,2383,2436,2955,2959
Seq#:3; N Pos. 2962,2998,4626,8255,18422,18460,18464,18484,18495,18508
Seq#:3; N Pos. 18520,18524,18560,18570,18571,18576,18591,18594,18610,18613
Seq#:3; N Pos. 18614,18619,18632,18633,18634,18635,18636,18637,18638,18639
Seq#:3; N Pos. 18640,18641,18642,18643,18644,18645,18646,18647,18648,18649
Seq#:3; N Pos. 18650,18651,18652,18653,18654,18655,18656,18657,18658,18659
Seq#:3; N Pos. 18660,18661,18662,18663,18664,18665,18666,18667,18668,18669
Seq#:3; N Pos. 18670,18671,18672,18673,18674,18675,18676,18677,18678,18679
Seq#:3; N Pos. 18680,18681,18682,18683,18684,18685,18686,18687,18688,18689
Seq#:3; N Pos. 18690,18691,18692,18693,18694,18695,18696,18697,18698,18699
Seq#:3; N Pos. 18700,18701,18702,18703,18704,18705,18706,18707,18708,18709
Seq#:3; N Pos. 18710,18711,18712,18713,18714,18715,18723,18735,18855



VERIFICATION SUMMARY

PATENT APPLICATION: US/10/534,099

DATE: 05/16/2005 TIME: 12:07:16

Input Set : E:\UTSC772US.APP.txt

Output Set: N:\CRF4\05162005\J534099.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number

L:167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:240

M:341 Repeated in SeqNo=3